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- Production of a piston ring (KR)
- Gas nitration of the piston ring
- Machining of the piston ring
-Piston ring geometry inspection

Prior Art

a) Adjustment of parameters for PVD coating

b) Put KR under pre-stress

c) PVD coating of KR

d) Measurement of the inherent stress of the anti-abrasion or anti-corrosion coating by means of X-ray diffraction in status b)

e) Application of tensile pre-stress or pressure pre-stress to an uncoated KR as a function of the measured inherent coating stress

f) Coating of the KR by means of the coating parameters according to step a)

Fig. 1

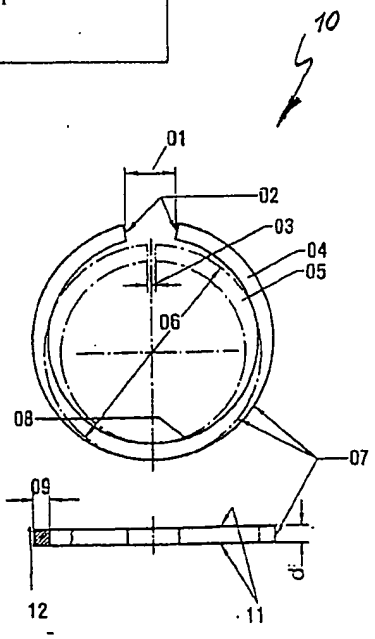

Fig. 2